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OGC 62-0516

15 March 1962

OGC Has Reviewed

MEMORANDUM FOR: Chief,

25X1

SUBJECT: Francis Gary Powers - U-2

1. With regard to your question as to what caused the damage at altitude to Powers' plane, the following is condensed from talks with Dr. Scoville and technical representatives of the Department of Defense.

2. Assuming that the U-2 horizontal stabilizer failed at altitude, as we now believe, the shock wave required to cause this could be produced by a high explosive warhead of the size attributed to the SA-2 missile exploding in the neighborhood of 100-150 feet from the plane. At very high altitudes components of the fuel and high explosive composition could be expected to create an orange glow. This should be considered in the nature of a conjecture more than a conclusion. The possibility of a nuclear equipped warhead is much less likely, and there is no evidence to support such a possibility other than the fact that a nuclear warhead could more readily have created the shock wave.

g/ Lawrence R. Houston

LAWRENCE R. HOUSTON
General Counsel

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1-Powers Board of Inquiry Files

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